## Recent research and education programmes by SMU and SKBI in "Sustainable Finance"

- 1. Highlights of research by SKBI faculty and/or SKBI visiting faculty in Sustainable Finance:
  - Marinela Adriana Finta, 2020. "Japanese monetary policy and its impact on stock market implied volatility during pleasant and unpleasant weather".

- Abstract: We investigate the effect of Japan's Monetary Policy Meeting releases on the intraday dynamics of the Nikkei Stock Average Volatility Index and its futures during pleasant and unpleasant weather. We show that at the time of a monetary policy release when the temperature is pleasant, there is a significant decline in Japanese equities' implied volatility and futures which lasts for about 10 minutes and 5 minutes, respectively. This decline is longer and exhibits a greater variation when releases occur during cold days. Finally, we emphasize the achievable losses and economic profits, given the reaction of Nikkei VI futures to the Japanese monetary policy releases during pleasant and unpleasant weather days, respectively. In particular, taking a short position at the start of the trading day on pleasant days and closing this position at the end of the trading day generates an average annual return of 5.6%.

• Liang, H., and Renneboog, L., 2020. "Global Sustainability Footprints of Sovereign Wealth Funds", Oxford Review of Economic Policy, Volume 36, Issue 2, Summer 2020, Pages 380–426.

- Abstract: With the emergence of sovereign wealth funds (SWFs) around the world managing equity of over \$8 trillion, their impact on the corporate landscape and social welfare is being scrutinized. This study investigates whether and how SWFs incorporate environmental, social, and governance (ESG) considerations in their investment decisions in publicly listed corporations, as well as the subsequent evolution of target firms' ESG performance. We find that SWF funds do consider the level of past ESG performance as well as recent ESG score improvement when taking ownership stakes in listed companies. These results are driven by the SWF funds that do have an explicit or implicit ESG policy and are most transparent, and by SWF originating from developed countries and countries with civil law origins. In relation to engagement, we find by means of two natural experiments with exogenous shocks (the Deepwater Horizon catastrophe and Volkwagen diesel s candal) that the ESG scores do not change significantly more for firms in which SWFs have ownership stakes. This potentially suggests that SWFs in general do not actively steer their target firms towards higher levels of ESG.

• Hong, H., and Weikai L., F. and Xu, J., 2019. *"Climate risks and market efficiency"*, Journal of Econometrics, Volume 208, Issue 1, January 2019, Pages 265-281.

- Abstract: Climate science finds that the trend towards higher global temperatures exacerbates the risks of droughts. We investigate whether the prices of food stocks efficiently discount these risks. Using data from thirty-one countries with publicly-traded food companies, we rank these countries each year based on their long-term trends toward droughts using the Palmer Drought Severity Index. A poor trend ranking for a country forecasts relatively poor profit growth for food companies in that country. It also forecasts relatively poor food stock returns in that country. This return predictability is consistent with food stock prices underreacting to climate change risks.

- 2. Key events at SMU-SKBI on Sustainable Finance:
  - "Green and Ethical Finance Conference", co-organized with Asian Development Bank Institute and the Journal of Banking & Finance, 16-18 September 2020.
  - SKBI Annual Conference on "Sustainable Finance", co-organised with Triple Bottom Line (TBLI) Group, November 2019.
  - "Energy Sustainability Conference," planned for end 2020.
- 3. Teaching cases on Sustainable Finance
  - *"Century Galaxy Group: The Price of Compassion"*, SMU Case by Liang Hao (with Tzu-Kuan Chiu and Wang Jialun).
  - *"Ant Financial: The Road to Financial Inclusion in China through QR Codes and Technologyas-a-Service",* SMU Case by Liang Hao (with Gabriel Lim Pang Keat, Cheah Sin Mei, Chiu Tzu-Kuan).
  - *"Music Securities: Making an Impact through crowdfunding"*, SMU/ADB Institute Case by Liang Hao (with Anant Kapoor, Bihong Huang and Dave Luo Jia Xuan).
  - *"Artepharm: Commercialising the Malaria Cure in Africa"*, SMU Case by Liang Hao (with Yang Dongning, Jiang Han, Adina Wong).
  - *"Growing a Global Forest: Ant Financial, Alipay, and the Ant Forest"*, SMU Case by Liang Hao (with Ryan Merrill, Hannah H. Chang, Liang Hao, Lan Yang, Adina Wong).

4. SMU Courses on Sustainability

- Second major "Sustainability" launched, including "Sustainable Finance" courses taught to undergraduates and in the Masters in Management program, Lee Kong Chian School of Business, 2019-2020.
- Certificate on "Sustainable Finance & Impact Investing: Risks and Opportunities Arising from Environmental, Social & Governance Issues," SMU Academy, 2019.
- Advanced Certificate in "Sustainability & Sustainable Businesses," SMU Academy, 2019.
- 5. Executive Training: Asian Financial Leaders Programme
  - Provides critical insights for senior-level executives in the financial sector to lead and grow their financial institutions. It also incorporates global and regional perspectives to strengthen participants' abilities to understand the complexities of both regional and global economic landscapes.
  - Participants are from banking, insurance, investment firms and asset management companies.
  - In 2019, for the first time a module on "Impact Investing" was included and this is continued in 2020.